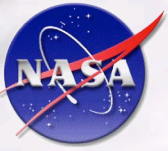




NASA's Export Control Program

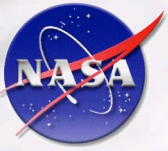
April 11, 2006

**Kenneth M. Hodgdon
Export Control & Interagency Liaison Division
Office of External Relations
NASA Headquarters**



Agenda

- **Basic Principles**
- **The NASA Export Control Program**
- **Lessons Learned**
- **The International Traffic in Arms Regulations**
- **The Export Administration Regulations**
- **Wrap-up & Where to Turn For More Information...**



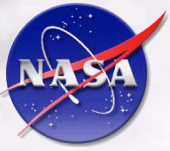
Some Basic Principles



Here's an important principle: **Export Control Violations are Federal Crimes**

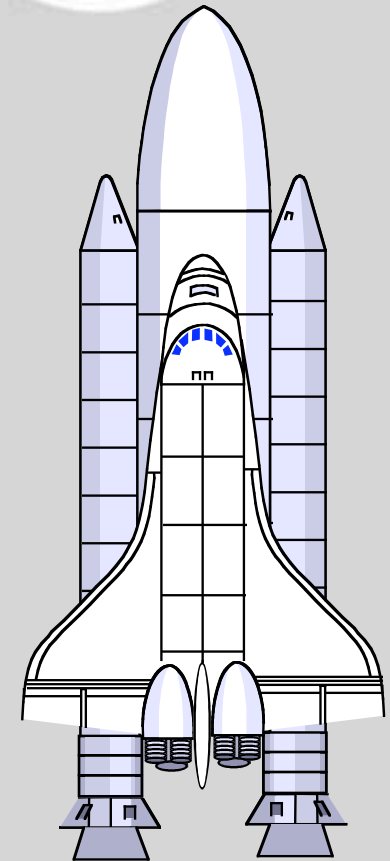
- **Protect Yourself: The Export Laws and Regulations Have Teeth and Can “Bite”**
 - **ITAR** Criminal and Civil Penalties
 - Fine of up to \$1 million per violation
 - Imprisonment - 10 years per violation
 - **EAR** Criminal and Civil Penalties
 - Fine of \$100K+
 - Imprisonment for up to 10 years
- **That's one reason why You need to be concerned about Your export practices**

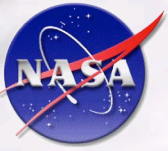




Main Reasons Certain Exports are “Controlled” by U.S. Law

- **National Security (NS)**
- **Foreign Policy (FP)**
- **Proliferation (MT, NP, CB)**





Remember - An Export Is...

- **The transfer of anything to a “FOREIGN PERSON” or a foreign destination by any means, anywhere, anytime, or a transfer to a “U.S. PERSON” with knowledge that the item will be further transferred to a “FOREIGN PERSON”.**



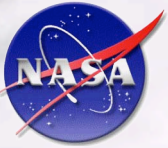
Therefore, it's all of the following and more:

- **Placing information on the World-Wide-Web, making data available through ftp sites, etc.**
- **Placing information in the Public Domain**
- **Verbal discussions w/foreign nationals or presentations to groups that include foreign nationals**
- **Handcarrying items outside the U.S.**
- **Traditional “Shipments” of items thru Center transportation offices outside the U.S.**
- **Mailing, faxing, e-mailing items outside the U.S. or to foreign nationals within the U.S.**
- **etc., etc.**

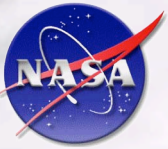


Public Domain v. Export Controlled Data

- **Data in the Public Domain is “uncontrolled” and “unlimited” dissemination***
- **Data subject to Export Control is restricted dissemination**
 - **May require a license**
 - **May be eligible for a license exception/exemption**
 - **May be EAR 99**



- **"The Administration shall provide for the widest practicable and appropriate dissemination of information concerning its activities and the results thereof"**
- and appropriate



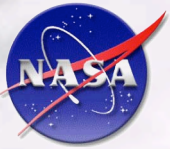
Why NASA Must be Concerned About Its Export Practices

- **Exporting is a “privilege”, *not* a “right”**
- **Export “privileges” can be revoked, precluding our ability to conduct international activities**
- **NASA holds significant expertise in space launch vehicle, satellites and other advanced/controlled technologies that others would love to have**
- **And don’t forget, export control violations can -- and do -- lead to criminal prosecution**



NASA Contractors and Export Control

- **The Department of State and, more recently, the Department of Commerce staff license applications to NASA for review**
- **NASA contractors, should be coordinating with NASA in advance of any license application that they intend to submit and which will further a NASA program**
 - **NASA might have useful input in framing the application and can advocate for its timely approval**
 - **Seeing applications after the fact can result in delays, and if not to our liking or not framed correctly, an RWA**
- **NFS Clause 1852.225-70 “Export Licenses” – required in all domestic contracts**
- **Contractors have responsibility to obtain any required licenses unless otherwise agreed with NASA**
- **NPR 2190.1 requires export plans and reporting for exports effected in support of NASA programs**



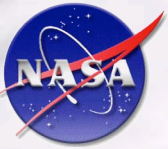
The NASA Export Control Program (ECP)

- **The NASA ECP is an “internal” NASA program**
- **Originally published as a handbook in November 1995; now an approved NPR 2190.1**
- **Centralized Export Policy & Compliance in Single Office at NASA Headquarters**
- **Export Administrators and Counsel named at each Field Center - resident “experts” on export laws/regulations**
- **Assigns Export Responsibilities and Standardizes Agency Procedures**



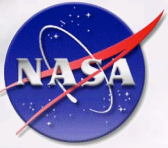
The NASA ECP: Key Concepts in NPR 2190.1

- **No exports of controlled items to any foreign entity under any NASA program unless the exporter is confident that such exports are in conformity with approved contracts or international agreements and U.S. export control laws and regulations**
- **NASA exports to foreign entities are only conducted in furtherance of NASA international agreements or contracts**
- **Recommends consultation with HEA, appropriate CEA, or counsel**
 - **Defines roles/responsibilities of Export Control Officials, Program/Project Managers, Transportation Officers, and all NASA employees & contractors, in general**
 - **Revised Export Processing Template (EPT) with Decision-Tree**
 - **TTCPs**
 - **Reporting Requirements for Use of License Exemptions**
 - **Training**
 - **Auditing**
 - **Violations & Compliance**



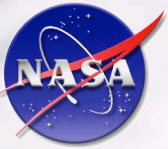
Export Control @ NASA Headquarters

- **Office of External Relations <<http://www.hq.nasa.gov/office/codei>>**
 - International Agreements
 - Coordination on Contracts w/Foreign Entities
 - Export Control Program
 - Foreign Access to NASA Installations
 - NASA Foreign Travel Approval/Coordination
 - Interagency Liaison
- **Office of General Counsel**
 - NASA Export Counsel & International Agreements
- **Office of Chief Information Officer**
 - NASA STI Program
 - NASA IT Security Policy (including the Internet)
- **Office of Security and Program Protection**
 - NASA Security Policies
 - Foreign Access to NASA Installations
- **Exploration Systems Mission Directorate**
 - External Release of NASA Software
 - Foreign Access to NASA Technology Transfer Materials
- **Office of Infrastructure, Management, and Headquarters Operations**
 - NASA Transportation Policies



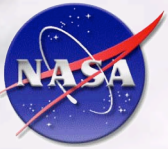
How Does The NASA ECP Affect Me?

- **Understand the Scope of the International Cooperation, and NASA's Responsibilities**
- **Be Aware and Think before you “export”**
- **Don't be intimidated by the rules - help is available, ask for it**



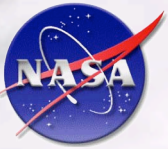
NASA's International Agreements

- **NASA's International Agreements - the basis for NASA foreign cooperative (or reimbursable) activity**
 - define the responsibilities of the parties, scope of the work to be performed, & the terms and conditions under which the cooperation will be effected
- **All NASA International Agreements contain a clause on transfers of controlled goods & data**
- **NASA's International Agreements do **NOT** trump export control laws & regulations**



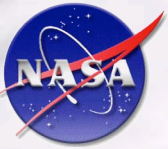
NASA International Agreements

- **Exchange of Goods and Data Clause – Cooperative Agreements**
 - The Parties are obligated to transfer only those technical data (including software) and goods necessary to fulfill their respective responsibilities under this Agreement, in accordance with the following provisions:
 - 1. Nothing in this article requires the Parties to transfer goods or technical data contrary to national laws and regulations relating to export control or control of classified information.
 - 2. The transfer of technical data for the purpose of discharging the Parties' responsibilities with regard to interface, integration, and safety shall normally be made without restriction, except as provided in paragraph 1 above.
 - 3. All transfers of goods and proprietary or export-controlled technical data are subject to the following provisions. In the event a Party or its related entity (e.g., contractor, subcontractor, grantee, cooperating entity) finds it necessary to transfer goods or to transfer proprietary or export-controlled technical data, for which protection is to be maintained, such goods shall be specifically identified and such proprietary or export-controlled technical data shall be marked. The identification for goods and the marking on proprietary or export-controlled technical data will indicate that the goods and proprietary or export-controlled technical data shall be used by the receiving Party or related entities only for the purposes of fulfilling the receiving Party's or related entity's responsibilities under this Agreement, and that the identified goods and marked proprietary technical data or marked export-controlled technical data shall not be disclosed or retransferred to any other entity without the prior written permission of the furnishing Party or its related entity. The receiving Party or related entity shall abide by the terms of the notice and protect any such identified goods and marked proprietary technical data or marked export-controlled technical data from unauthorized use and disclosure. The Parties to this Agreement will cause their related entities to be bound by the provisions of this Article related to use, disclosure, and retransfer of goods and marked technical data through contractual mechanisms or equivalent measures
 - 4. All goods exchanged in the performance of this Agreement shall be used by the receiving Party or related entity exclusively for the purposes of the Agreement. Upon completion of the activities under the Agreement, the receiving Party or related entity shall return or, at the request of the furnishing Party or its related entity, otherwise dispose of all goods and marked proprietary technical data or marked export-controlled technical data provided under this Agreement, as directed by the furnishing Party or related entity.



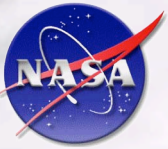
How Does This Affect Me?

- **STI PUBLICATION/DISSEMINATION**
 - All STI is to be reviewed for possible export dissemination restrictions
 - Accomplished via NPR 2200.2B and NASA Form 1676 or Center equivalent Form
- **EXTERNAL SOFTWARE RELEASES**
 - Export Control Review is an inherent part of the software release process – NPR 2210.1, External Release of NASA Software
- **NASA Security of Information Policy – NPR 2810.1**
 - Export Control Review part of decision process for placing technical data on websites



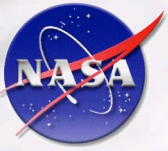
HOW DO I KNOW IF AN ITEM IS SUBJECT TO CONTROL?

- **Nobody said it was easy!**
 - determine whether it's publicly available
 - determine jurisdiction - ITAR or EAR
 - check with the source of the product (mfr)
 - seek assistance from your CO/COTR/Program Office/CEA/CEC
 - And if you are really stuck, ask Headquarters for help
- **Practical Test for Placing it in the Public Domain**
 - Is it appropriate that our worst enemies have access to the technical information?



Lessons Learned

- Export Control is Crucial—Take the time to get it Right!
- If you need a license or agreement—get one
- Don't complain, get educated and comply
 - Training (classes and websites) from SIA, Commerce, State
- Talk to Commerce, State, NASA Program upfront
 - If you get advice—Follow it!
- Plan Way Ahead—Lead times 2-6 months
 - Commerce, State, DOD, NASA have limited resources
- Identify NASA Program, NASA POC, and NASA Centers
- Identify a readily available and responsive POC
 - Phone #'s and e-mail addresses



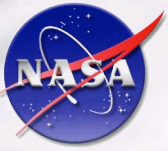
Lessons Learned

- The cover letter should be comprehensive and concise (Be specific who, what, why, when, and where)
- Be upfront—address the tough issues
- Include approved and relevant International Agreements as Appendices
- Explain rationale for U.S Hardware on Foreign Launch Vehicles
- Engineers love the technical data (Appendices)
- Export Control is a moving target—laws and geopolitics
- Liable for subcontractors—go visit them
 - Unregistered, Unfamiliar, Foreign Nationals, Procedures



Lessons Learned

- Foreign parent companies (need for fire walls)
- Foreign National workers, students, and interns
- Off-shore servers, inter-company—internets, need for encryption
- Scientist and engineers love to talk
- Bad news does not get better with age—report violations promptly (bigger the delay, bigger the fine)
- Exports—anything, anywhere, anytime, any manner
 - Phone calls, e-mails, meetings, laptops, luggage, websites
- Management Commitment to get it right
- Time and money spent upfront pays dividends

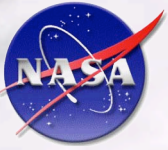


*The International Traffic in Arms Regulations (ITAR)**

22 CFR 120-130

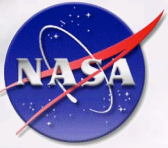
***Updated via Federal Register Notices**

<http://www.pmdtc.org/>



The International Traffic in Arms Regulations (ITAR)

- **Important ITAR Definitions**
 - **Defense Article**
 - **Technical Data (includes Software)**
 - **Public Domain**



The International Traffic in Arms Regulations (ITAR)

- **Important ITAR Definitions**
 - **“Defense Article”** - any item on the **USML**, including **“technical data”**.
 - Note: **Contrary to popular opinion, Defense Articles are not exclusively “military” items; (e.g., with the exception of the Space Station, all *spacecraft* are “Defense Articles”; the Space Shuttle is a “Defense Article”, etc.)**



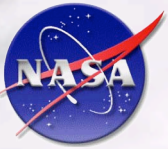
The International Traffic in Arms Regulations (ITAR)

- **Important ITAR Definitions (cont'd)**
 - **Technical Data -**
 - **information** which is required for the design, development, production, manufacture, assembly, operation, repair, testing, maintenance, or modification of “**defense articles**”
 - **classified** information related to “**defense articles**”
 - **information** covered by an invention secrecy order
 - **software** directly related to “**defense articles**”



The International Traffic in Arms Regulations (ITAR)

- **Important ITAR Definitions (cont'd)**
 - **Technical Data (cont'd) –**
 - **does not include information concerning general scientific, mathematical or engineering principles commonly taught in schools, colleges and universities or information in the “public domain”.**
 - **does not include basic marketing information on function or purpose or general system descriptions of “Defense Articles”.**

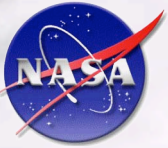


The International Traffic in Arms Regulations (ITAR)

- **Important ITAR Definitions (cont'd)**

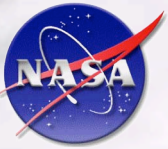
- **Public Domain** - information which is **published and which is generally accessible or available to the public**:

- through sales at newsstands and bookstores;
 - through subscriptions which are available without restriction to any individual who desires to obtain or purchase the published information;
 - through second class mailing privileges granted by the U.S. government;
 - **at libraries open to the public or from which the public can obtain documents;**
 - through patents available at any patent office;
 - through unlimited distribution at a conference, meeting, seminar, trade show or exhibition,, generally accessible to the public, in the United States;
 - **through public release (i.e., unlimited distribution) in any form (e.g., not necessarily in published form) after approval by the cognizant U.S. government department or agency;**



The International Traffic in Arms Regulations (ITAR)

- **Important ITAR Definitions (cont'd)**
 - **Public Domain (cont'd)**
 - through **fundamental research** in science and engineering at accredited institutions of higher learning in the U.S. where the resulting information is ordinarily published and shared broadly in the scientific community
 - **Fundamental research** is defined to mean basic and applied research in science and engineering **where the resulting information is ordinarily published and shared broadly within the scientific community, as distinguished from research the results of which are restricted for proprietary reasons or specific U.S. government access and dissemination controls.**
 - **University research** will ***not*** be considered “**fundamental research**” if:
 - the University or its researchers **accept other restrictions on publication of scientific and technical information resulting from the project or activity, or**
 - the research is funded by the U.S. government and specific access and dissemination controls protecting information resulting from the research are applicable.



The International Traffic in Arms Regulations (ITAR)

- **Licenses v. Exemptions**

- When required, obtain **ITAR** export licenses and agreements prior to effecting an export
- As a government agency, NASA enjoys certain license exemptions: 22 CFR 126.4 and 125.4.b.3 (for contracts)
- These exemptions do not apply in all circumstances and **never** when dealing with “**foreign persons**” of **proscribed** countries (22 CFR 126.1)

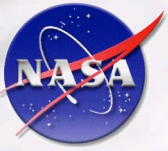
- **Export Licenses**

- Export licenses are issued by the Dept of State for the export of “**defense articles**”
- Technical Assistance Agreements are issued for the export of **Technical Data and Defense Services** (22 CFR 120.9 and 129.10)

- **License Exemptions**

- The **ITAR** contains numerous **exemptions*** to licensing requirements, but not to the fact that an item is subject to control

- *Use of **exemptions** is pursuant to the specific provisions of the **ITAR**, the **NASA ECP** and the **NASA/Foreign Partner International Agreement**



The International Traffic in Arms Regulations (ITAR)

- **Proscribed Countries - 22 CFR 126.1**
 - If a country appears on the “proscribed country” list, it is (generally) U.S. policy to deny licenses, or other approvals, associated with exports and imports of defense articles and defense services, destined for or originating in that country
 - **ITAR** License Exemptions are trumped if a “**foreign person**” from any of these countries is involved; i.e., a license must be applied for.



ITAR Proscribed Countries - 22 CFR 126.1

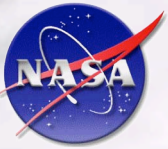
- **AFGHANISTAN (case by case)**
- **BELARUS**
- **BURMA**
- **CHINA (PRC)**
- **CONGO (case by case)**
- **CUBA**
- **CYPRUS**
- **HAITI**
- **INDONESIA**
- **IRAN**
- **IRAQ (case by case)**
- **IVORY COAST**
- **LIBERIA**
- **LIBYA (case by case)**
- **NORTH KOREA**
- **RWANDA (case by case)**
- **SIERRA LEONE**
- **SOMALIA**
- **SUDAN**
- **SYRIA**
- **VIETNAM**
- **YEMEN**
- **ZIMBABWE**



The International Traffic in Arms Regulations (ITAR)

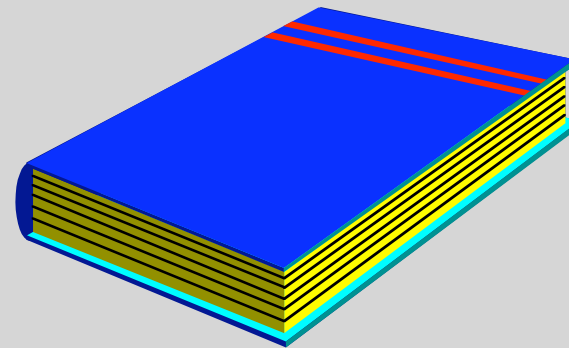
Rule of Thumb - seek and obtain ITAR export licenses for . . .

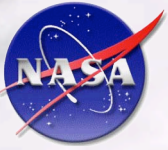
- the transfer of hardware on the USML,
- for any export of information (technical data) required for the detailed design, development, production, manufacture, assembly, operation, repair, testing, maintenance, or modification of a Defense Article
- for any transfer of hardware or technical data involving a “foreign person” in or from a “proscribed country”.



The International Traffic in Arms Regulations (ITAR)

- **Recordkeeping - records must be maintained on most transfers, regardless of whether or not a license was required; i.e., records must be maintained even when using license exemptions**





The Export Administration Regulations (EAR)*

15 CFR 730-774

***Updated via Federal Register Notices**

<http://bis.doc.gov>



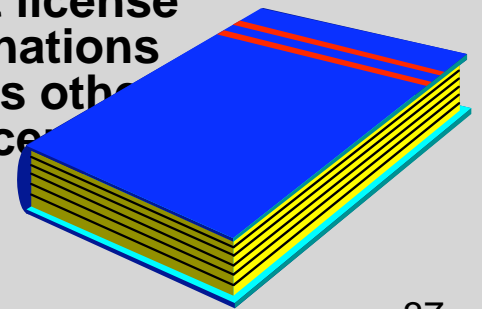
The Export Administration Regulations (EAR)

- **Regulations which control the export of goods and technical data on the Commerce Control List (CCL), including certain items on the Missile Technology Control Regime Annex.**
- **Items on the CCL are typically referred to as “dual-use” items.**



The EAR

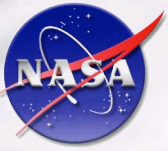
- ❑ Records must be maintained on most transfers, regardless of whether or not a license was required; i.e., records must be maintained even when using license exemptions
- ❑ The EAR requires that records be maintained for all exports or transfers and imports of items on the CCL for a period of five (5) years from the expiration of the license
- ❑ The statute of limitations for criminal actions under the EAA is five (5) years. Therefore, it is advisable to retain all export control records for not less than five (5) years after the transfer or expiration of the license. BIS & USCS may inspect records at any time
- ❑ Records to be retained include the following in original or copy form: shipping documents (e.g., GBLs, SEDs, etc.); validated licenses; letters to NASA contractors by Contracting Officers authorizing the use of export license Exceptions or Exemptions; classification determinations by the Contractor, NASA, BIS, or DTC; and records other than SEDs regarding the use of export license Exceptions or Exemptions, where appropriate





Before Effecting any Export...

- **Understand the authority and the necessity for the “export” - NASA/Foreign Partner Agreement, etc.**
- **“Classify” the item(s) to be exported (hardware, software, technical data)**
- **Determine if the item is eligible for an “exception/exemption” to obtaining an export license, and if not,**
- **Apply for and obtain an export license**
- **Cite exception/exemption/license authority on export paperwork and comply with requirements of regulations, license and/or agreement.**



Bottom Line

- **Every NASA employee and NASA Contractor has a responsibility to observe U.S. export laws and regulations, to comply with NASA's Export Control Program, and to be a "responsible" exporter**



Where Can I Get Help?

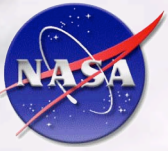
Call Your Contract Officer, Contract Technical Representative, or Center Export Representative:

Center Export Representatives:

- **GSFC, Tom Weisz/CEA – 301-286-4541**
- **JPL, Olga King/CEA – 818-393-6379**
- **LaRC, Sam Capino/CEA – 757-864-2592**



**or Call Washington: John Hall or Ken Hodgdon
202-358-0330 or -0535**



Internal NASA Resources

- NPD/NPR 2190.1, The NASA Export Control Program
- NPD 2200.1, Management of NASA Scientific and Technical Information
- NPR 2200.2B, NASA Scientific and Technical Information
- NPR 2210.1A, External Release of NASA Software
- NPD 1371.1F, Waivers to the Residence Abroad Requirement for Employees of NASA Contractors/Grantees
- NPR 1371.1, Requests for Waivers to the Residence Abroad Requirement for Exchange Visitors Sponsored by NASA Contractors/Grantees
- NPD 2110.1E, Foreign Access to NASA Technology Transfer Materials
- NPD 1371.5A, Coordination and Authorization of Access by Foreign Nationals and Foreign Representatives to NASA
- NPR 2810.1 Security of Information Technology - *includes NASA web policy*